



APPLICATION

The Tamrock Solo 5–7F Cabin is an electro-hydraulic long-hole drilling rig for small and medium scale production drilling in underground mines. The rig is capable of drilling 64 – 102 mm holes up to 38 meters.

The rig has been designed for vertical and inclined plane rings and fans and also for parallel long production holes as well as for long single holes. The robust ZR 20 boom has 2 meters parallel drilling coverage. The 360° rotation in full parallel coverage area and wide tilt angle ranges forward and backwards make the boom suitable to various drilling applications.

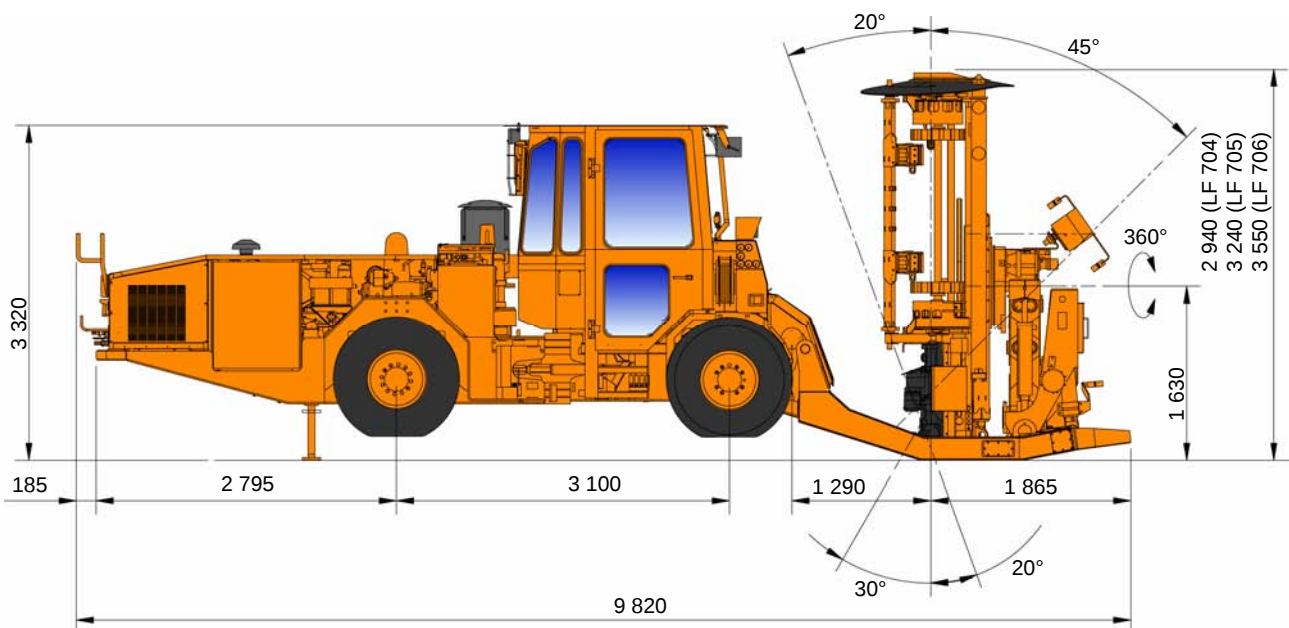
Simple and proven technical solutions ensure efficient and reliable operations. The rigid boom and feed construction together with innovative centralizer gives optimal drilling accuracy. Good stability characteristics enables fast tramming even in challenging road conditions. Both drilling and tramming are done from the operator's platform. Operator comfort is achieved by enclosed sound proof cabin.

The new carrier is designed for better access to the daily service points.

MAIN SPECIFICATIONS

Carrier	1 x TC 5
Safety cabin	1 x FOPS (ISO 3449) ROPS (ISO 3471)
Rock drill	1 x HL710S
Drilling module	1 x LF700 / Pito 5
Rod handling system	1 x RC 700 (optional)
Boom	1 x ZR 20
Control system	1 x TPC LH 5
Powerpack	1 x HP 555 (55,0 kW)
Shank lubricating device	1 x KVL 10-1
Air compressor	1 x CT 10 (7,5 kW)
Water pump	1 x WBP 2 (4,0 kW)
Main switch	1 x MSE-10
Cable reel	1 x TCR 1
Length	9 855 mm
Width	1 900 mm
Height	2 920 mm
Weight	18 600 kg
Tramming speed	
Horizontal	12,0 km/h
14 % = 1:7 = 8°	5,0 km/h
Gradeability	28 % = 1:3,5 = 15°
Noise level (EN 791, free field condition)	
In cabin	LpA = 80 dB
Emitted	LwA = 115 dB

GENERAL DIMENSIONS



TC 5 CARRIER

Diesel engine	Deutz BF4M 2012 74 kW (99 hp) Catalyzer
Transmission	Hydrostatic
Transfer case	Clark-Hurth drop gear
Axles	Case New Holland D63
Brakes	
Service	Hydrostatic transmission + positive braking
Parking and emergency	Hydraulic oil immersed multiple disc brakes on both axles
Tyres	12.00 – 20 PR 20
Steering	Frame steering Orbitrol
Articulation	± 40°
Rear oscillation	± 10°
Ground clearance	300 mm
Fuel tank	150 l
Hydraulic jacks	
Front	1 x Front frame stabilizer
Rear	2 x Hydraulic jacks
Safety cabin	FOPS (ISO 3449) ROPS (ISO 3471) Pressurized Operator's seat

HL710S ROCK DRILL

Weight	245 kg
Length	1 134 mm
Height	350 mm
Profile height	252 mm
Power class	19,5 kW
Max working pressure	
Percussion	190 bar
Rotation	175 bar
Max torque	
200 cm ³ motor	860 Nm
Hole size	64 – 102 mm
Flushing water pressure	5 – 15 bar

LF700 DRILLING MODULE

LF70x / Pito 5	x = 4' / 5' / 6'
Cuttings collector	CC 705

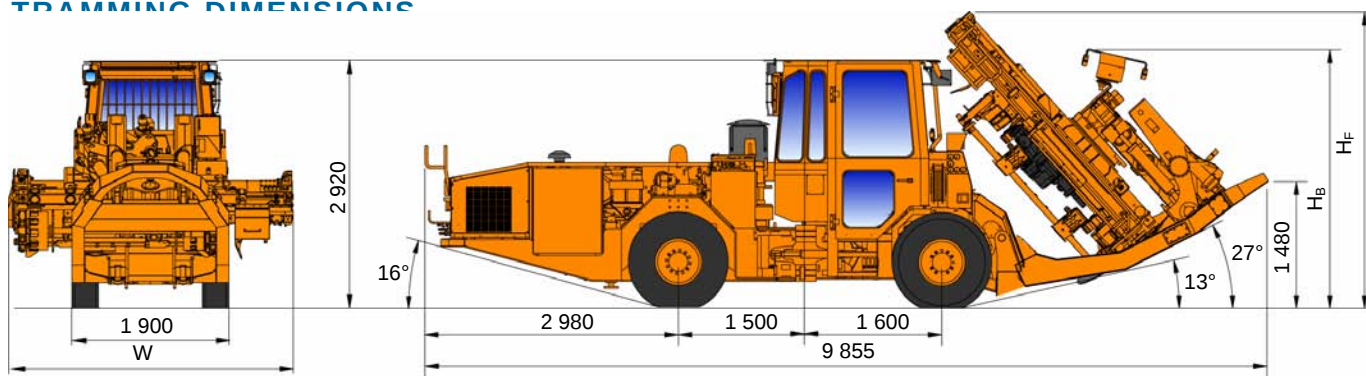
RC 700 ROD HANDLING SYSTEM

RC 70x, option	x = 4'/5'/6'
Capacity	20+1 rods / tubes

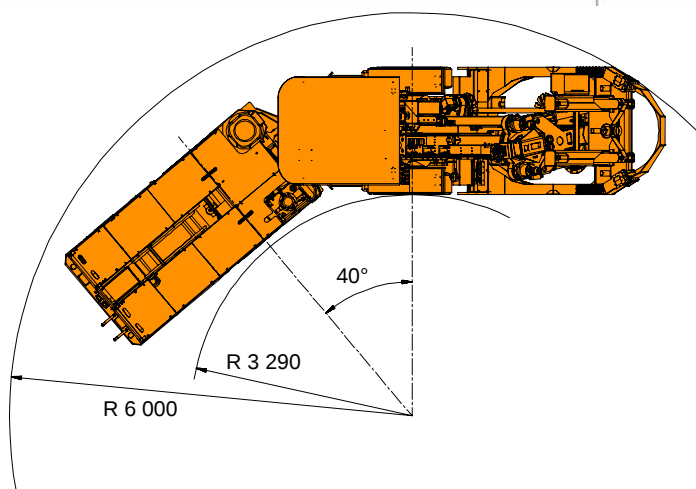
ZR 20 BOOM

Parallel coverage	2 000 mm
Feed extension	
LF 704	985 mm
LF 705	1 050 mm
LF 706	1 200 mm
Boom weight, net	2 200 kg
Rotation angle	360°
Stinger extension (rear)	1 500 mm

TRAMMING DIMENSIONS



Drilling module	H _B	H _F	W
LF 704	2 920	2 920	2 940
LF 705	2 920	3 100	3 240
LF 706	3 020	3 450	3 550



TPC LH 5 CONTROL SYSTEM

Power control	Adjustable full power Adjustable collaring power
Anti-jamming control	Adjustable anti-jamming pressure
Rotation control	Adjustable rotation speed
Flushing control	Water flushing flow and pressure control Air-mist flushing (option)

HP 555 POWERPACK

Electric motor	1 x 55 kW 3-phase motor
Pump types	
Percussion, feed, boom and rod handling	1 x 130 l/min variable displacement axial piston pump
Rotation	1 x 60 l/min variable displacement axial piston pump
Filtration	
Pressure	1 x 20 micron
Return	1 x 12 micron
Oil tank volume	Max. 180 l
Tank filling	1 x manual pump
Oil cooling	1 x OW 30 water cooler

AIR CIRCUIT

Compressor type	1 x CT 10 (7,5 kW)
Capacity	1.0 m³/min (7 bar)
Shank lubricating device	1 x KVL 10-1
Air consumption	250 – 350 l/min
Oil consumption	200 – 300 g/h

WATER CIRCUIT

Water pump type	1 x WBP 2 (4,0 kW)
Capacity	100 l/min (12 bar) With 2 bar inlet pressure
Inlet pressure	2 – 7 bar (while drilling)
Inlet pressure control valve	1 x WP 70

ELECTRICAL SYSTEM

Total input power	73 kW
Main switch	1 x MSE-10
Standard voltages	380 – 690 VAC 50 or 60 Hz
Voltage fluctuation	Max ±10 %
Lighting	
Working lights (24 VDC)	Front 2 x 35 W (H.I.D.) Rear 2 x 70 W
Driving lights (24 VDC)	Front 2 x 70 W Rear 2 x 70 W
Positioning lights	2 x Laser type
Automatic cable reel	1 x TCR 1

COVERAGE AREA

MINIMUM DRIFT SIZE

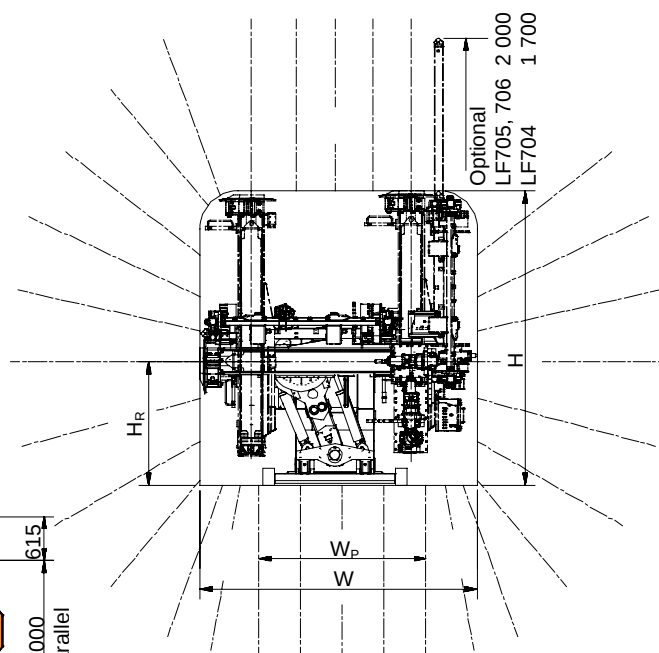
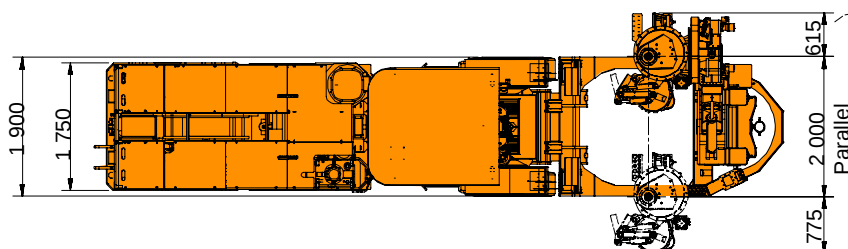
Drilling module	H	W	W _P	H _R
LF 704	3 350	3 150	1 460	1 620
LF 705	3 650	3 450	1 760	1 620
LF 706	3 950	3 750	2 000	1 620

Included 100 mm clearance on each side

MAXIMUM DRIFT SIZE

Drilling module	H	W	W _P	H _R
LF 704	3 700	4 800	2 000	1 740
LF 705	4 000	5 100	2 000	1 740
LF 706	4 150	5 250	2 000	1 740

With rear stingers in use without optional front stinger



OPTIONAL EQUIPMENT

DRILLING SYSTEM

- Rod handling system RC 700
- Readiness for double tools system; rods and tubes
- Drilling instrumentation TIS, D, DDS
- Data logging for TIS
- Front stinger (needed for downholes)
- Air mist flushing with outer compressed air feed
- Power extractor for HL710S
- *) HL800S rock drill with stabilizer

ELECTRICAL SYSTEM

- Electric cable rubber or PUR
- Ground fault and over current unit VYK
- *) 1 000 V electric system
- Star-Delta starting (380 – 690 VAC only)
- 230 VAC power outlet max. 4 500 VA
- 3-phase outlet network voltage

CARRIER

- Cabin air conditioning (drilling and tramming)
- Cabin heating (drilling and tramming)
- 12 VAC electric outlet and CD-player/radio readiness
- CD-player / radio in cabin
- *) Stainless steel cabin (FOPS only)
- Exhaust scrubber
- Complete spare wheel
- Hand pump for manual brake release

OTHER OPTIONAL EQUIPMENT

- Fire extinguisher (bottle only)
- Manual fire suppression system, 6 nozzles
- Automatic fire suppression system, 6 nozzles
- Pressure cleaning system (15 bar) with reel
- High pressure cleaning system with reel and handset
- Water hose 1½" (65 m)
- *) Electric filling pump for hydraulic oil
- Greasing system (Lincoln) with pump, reel and nozzle
- Centralized greasing
- Automatic greasing system (Lincoln)
- Biodegradable oils
- Fast filling and evacuation system (Wiggins) for fuel
- Fast filling and evacuation system (Wiggins) for fuel, transmission, engine and hydraulic oil
- * EU, UL, CSA, AUS norms package

*) = Replaces standard component

Sandvik Mining and Construction reserves the right to change this specification without further notice.